CALIBRATION SYSTEM FOR AN ELECTRONIC SIGN

ABSTRACT OF THE DISCLOSURE

Electronically programmed signs consist of any array of picture elements (pixels) that can be controlled independently to create an image. Varying the intensity of each pixel and adding multiple colors per pixel will enhance the image quality. It is currently common to have displays that use one, two or three separate colors in a pixel (monochrome, red-green, and red, green and blue) with intensity levels of two, four, eight up to 256 and beyond. Multiple colored pixels can combine colors at various intensity levels to expand the displayable color palette. The number of colors it is possible to display is calculated by the following formula:

$$\text{total number of displayable colors} = (\text{number of intensity levels per color})^{(\text{number of primary colors})}$$

While raising the number of intensity levels and colors improves image quality, it also raises the viewer's sensitivity to inconsistencies in both parameters.